



## Introducing restrictions to achieve unlimited creativity in the fashion design process

Yoon Yang and Fatma Baytar, Cornell University

**Keywords:** creativity in design, creative patternmaking, constraints

**Introduction:** Creative fashion design process can be considered a problem-solving process as it starts with a problem, which is to satisfy customers with new designs (Robinson et al., 2019). During the problem-solving process, a fashion designer gathers design sources such as evolving cultures or aesthetics of the time that could be applied to the new designs. After the research, the designer releases their new creative design as a possible solution to the need of customers (Brannon, 2011). Hopkins (2021) broke down the creative fashion design process into details, which consists of (a) conducting research on inspirations, (b) developing new designs, and (c) prototyping them. LaBat and Sokolowski (1999) divided the process into three stages including research, creative exploration, and production. Creativity is highly associated with the first two stages where new designs are developed from inspiration as creativity is traditionally considered to be a synonym for ‘novelty’ (Parkhurst, 1999; Rhodes, 1961; Sternberg, 1999).

In fashion design, the prototyping stage which involves patternmaking of the garment has not been highlighted as a part of the creative fashion design process. Therefore, the present study discusses a new conceptual method to measure how patternmaking in the fashion design process could evoke the creativity of fashion designers and how creative patternmaking could be a creative fashion design process itself.

**Conceptual design process:** The *Flow theory* defines creativity as a symbiotic experience that flourishes within multi actors under certain conditions, i.e., person, field, and domain (Csikszentmihalyi, 1996; Csikszentmihalyi & Csikszentmihalyi, 2014). A creative idea pops up in a creative *person*, but to do that the individual has to have a significant amount of information and culture related to the *domain* accumulated beforehand. Then when the creative idea is released, people from a *field* should be able to distinguish it from others and appreciate it (Csikszentmihalyi & Csikszentmihalyi, 2014). A flow of creativity is experienced when highly creative artists or scholars are working on their best work (Csikszentmihalyi & Csikszentmihalyi, 2014) which may refer to the state of a runner’s high. When individuals have sufficient skills in the ‘domain’ and try to overcome ‘challenges’ with them, they are self-motivated and go through the ‘flow’ of creativity in which they feel much joy (Shernoff et al., 2003). Baughman and Mumford (1995) stated that the quality and the originality of creative performance rated higher when a task was more challenging due to conditions and limitations. It is found that people innovate better under constraints which is because they could better ponder the issue narrower and deeper following plausible and effective solutions (Cooper, 2014; Acar et al., 2019; Perry, 2017). Thus, adding challenges of ‘design restrictions’ to the creative patternmaking process would fuel the designer’s creativity.

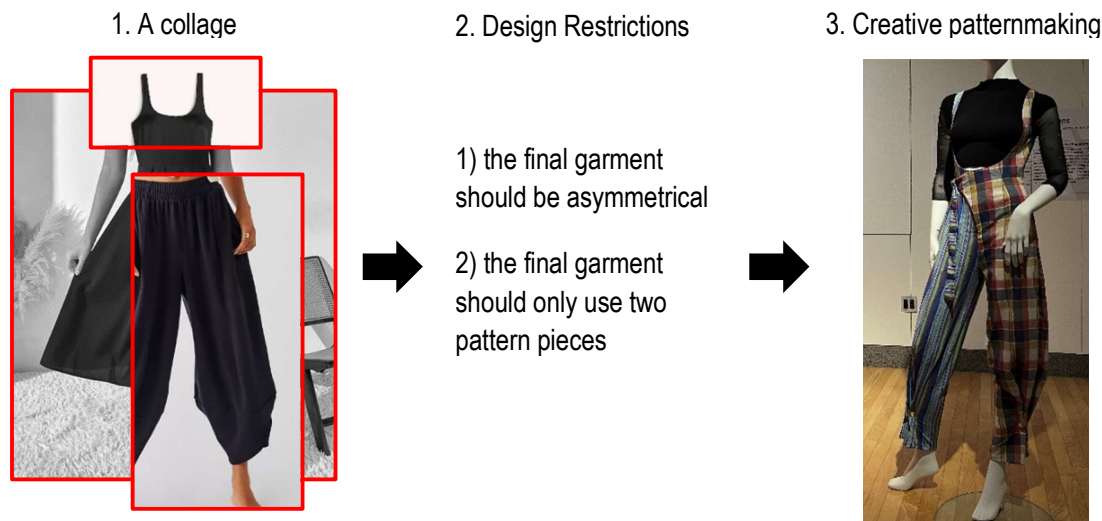
The proposed fashion design process, which we coined “*Flow with Constraints*” (Figure 1) starts with making a collage of random existing design elements. To add ‘challenges’ in patternmaking to experience the ‘flow’ of creativity, ‘design restrictions’ are assigned to the

Page 1 of 4

collage. Fashion designers perform creative patternmaking within the design restrictions. Below are specific steps to developing the sample collage into a new garment with a new creative patternmaking method:

1. Create a collage of ensembles
2. Apply ‘design restrictions’
3. Perform creative patternmaking of the collage based on the design restrictions assigned

Figure 1 shows the creative patternmaking process starting from a collage of scooped neckline, hourglass silhouette, and cocoon pants. Design restrictions applied to the creative patternmaking process were (1) the final garment should be asymmetrical and (2) the final garment should only use two pattern pieces. Therefore, the final garment was designed to have left and right pattern pieces with asymmetrical closure on the side while incorporating design elements included in the collage from the beginning.



**Figure 1.** *Flow with Constraints* fashion design process (Sources for the collage: Abercrombie & Fitch, n.d.; Free People, n.d.; Shein, n.d.)

Following are some other examples of the ‘design restrictions’ that could be applied in the creative patternmaking process: the final garment should include every opening possible, the final garment should be monochrome but built with various fabrics with contrasting drapes, the final garment should only be constructed with rectangular-shaped pattern pieces, and the final garment should only include one of the following: darts, gathers, or pleats to complete the look.

**Discussion and Conclusion:** The proposed method for the creative patternmaking process can allow both amateur and skilled fashion designers to expand their boundaries and express creativity. The fashion design process aims to create garments as functional objects that cover the human body and accommodate the mobility of each body part. The traditional creative fashion design process, starting from visual inspiration, often leaves unskilled designers in the

dark, especially when developing visual inspirations into wearable garment formats. the *Flow with Constraints* process that focuses on creative patternmaking can ensure that the resulting garment is in a wearable format. By applying easier challenges during the design process, designers can experience their own level of ‘flow’ of creativity. For future studies, we will test this method in a patternmaking course and measure its effects on student work. Projects will be evaluated with the peer nomination method which enables peers in the domain to score others’ creativity to reduce subjectivity during the evaluation and reduce errors from social evaluation (Csikszentmihalyi et al., 2014).

### References

- Abercrombie & Fitch. (n.d.). [Satin Slip Midi Dress]. Retrieved March 31, 2023, from <https://www.abercrombie.com/shop/us/p/satin-slip-midi-dress-52584158?seq=03>
- Acar O., Tarakci, M., & Knippenberg, D. (2019, November 22). *Why Constraints Are Good for Innovation*. Harvard Business Review. <https://hbr.org/2019/11/why-constraints-are-good-for-innovation>
- Baughman, W. A., & Mumford, M. D. (1995). Process-analytic models of creative capacities: Operations influencing the combination-and-reorganization process. *Creativity Research Journal*, 8(1), 37-62.
- Brannon, E. L. (2011). *Designer's guide to fashion apparel*. New York: Fairchild Books.
- Cooper, B. (2014, February 26). *The Psychology of Limitations: How and Why Constraints Can Make You More Creative*. Buffer. <https://buffer.com/resources/7-examples-of-how-creative-constraints-can-lead-to-amazing-work/>
- Csikszentmihalyi, M. (1996). *Creativity: flow and the psychology of discovery and invention*. New York: HarperCollinsPublishers.
- Csikszentmihalyi, M., & Csikszentmihalyi, M. (2014). *Society, culture, and person: A systems view of creativity* (pp. 47-61). Springer Netherlands.
- Csikszentmihalyi, M., Csikszentmihalyi, M., & Wolfe, R. (2014). New conceptions and research approaches to creativity: Implications of a systems perspective for creativity in education. *The systems model of creativity: The collected works of Mihaly Csikszentmihalyi*, 161-184.
- Free People. (n.d.). [Leo Pants]. Retrieved March 31, 2023, from <https://www.freepeople.com/shop/leo-pants/>
- Hopkins, J. (2021). *Fashion Design: The Complete Guide*. Bloomsbury Publishing.
- LaBat, K. L., & Sokolowski, S. L. (1999). A three-stage design process applied to an industry-university textile product design project. *Clothing and Textiles Research Journal*, 17(1), 11-20.
- Parkhurst, H. B. (1999). Confusion, lack of consensus, and the definition of creativity as a construct. *The Journal of Creative Behavior*, 33(1), 1-21.
- Perry, P. (2017, August 15). *Why Imposing Restrictions Can Actually Boost Creativity*. Big Think. <https://bigthink.com/mind-brain/why-imposing-restrictions-can-actually-boost-creativity/>

- Rhodes, M. (1961). An analysis of creativity. *The Phi delta kappan*, 42(7), 305-310.
- Robinson, J. R., Workman, J. E., & Freeburg, B. W. (2019). Creativity and tolerance of ambiguity in fashion design students. *International Journal of Fashion Design, Technology and Education*, 12(1), 96-104.
- Shein. (n.d.). [Ruched Pleated Detail A-line Dress]. Retrieved March 31, 2023, from <https://us.shein.com/Ruched-Pleated-Detail-A-line-Dress-p-9777492-cat-1727.html>
- Sherhoff, D. J., Csikszentmihalyi, M., Shneider, B., & Sherhoff, E. S. (2003). Student engagement in high school classrooms from the perspective of flow theory. *School psychology quarterly*, 18(2), 158.
- Sternberg, R. J. (Ed.). (1999). *Handbook of creativity*. Cambridge University Press.